Remarks

Claims 164, 168-171, 174-177, 220-222, 224, 225, 228, and 229 are amended herein. Claims 163, 165-167, 172, 173, 179-196, 209, 211-219, 223, 226, 227, and 230-234 are cancelled herein. Upon entry of this amendment, claims 164, 168-171, 174-178, 197-208, 220-222, 224, 225, 228, and 229 will be pending.

Objection under 37 C.F.R. § 1.75

The objection of claims 193-196, 216, 217, 219, and 220 under 37 C.F.R. § 1.75 as being duplicates of claims 171, 172, 174, 175, and 211-214 is now moot in light of (i) the cancellation of claims 172, 193-196, 211-214, 216, 217, and 219 and (ii) the amendment of claims 174, 175, and 220 to depend from claim 171, either directly or indirectly.

As such, Applicants respectfully request withdrawal of the objection.

Objection under 37 C.F.R. § 1.75

The objection under 37 C.F.R. § 132 is now moot in light of (i) the cancellation of claims 211 and 213 and (ii) the amendment of the specification to remove the paragraphs added in Applicants' LETTER TO PATENT AND TRADEMARK OFFICE of February 25, 2004.

As such, Applicants respectfully request withdrawal of the objection.

Rejections under 35 U.S.C. § 112

The first rejection under 35 U.S.C. § 112 relating to the language "a plastic core consisting of plastic" is now moot in light of (i) the cancellation of claims 211-214, 216-219, 223, 227, and 230-232 and (ii) the amendment of claims 220, 221, 224, 225, 228, and 229.

The second rejection under 35 U.S.C. § 112 relating to the language "single use plastic stirrer" is now moot in light of (i) the cancellation of claims 163, 179, 183, 193, 233, and 234 and (ii) the amendment of claims 171 and 176.

As such, Applicants respectfully request withdrawal of the rejections.

Rejections under 35 U.S.C. §103

Claim 169

Reconsideration of the rejection of claim 169 under 35 U.S.C. §103 as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited and applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

As discussed in Applicant's previous Office action responses[1], claim 169 is directed to an apparatus having a drive mechanism comprising (i) a gear train for rotating each magnetic feed through device and (ii) a motor for rotating gears of the gear train to effect conjoint rotation of the spindles at speeds from about 0 to about 3000 rpm. None of the references, taken individually or in combination, discloses or suggests these novel elements.

None of the references discloses or suggests a gear train for rotating multiple spindles and a motor for rotating the gear train. As discussed in Applicant's previous responses, Salvet discloses a shaft-stirred magnetic feed through device for stirring the contents of a vessel, but it does not disclose multiple devices connected by a gear train. Aldrich similarly fails to disclose a common gear train for rotating multiple shafts. Corkan discloses stir bar stirring with a fifteen-vessel solid-state stirring assembly 16A (Fig. 2), but fails to disclose a gear train for rotating each of the stir bars. Nelles discloses a single reactor and therefore has no need for such a gear train. Lebl includes multiple reaction vessels, but fails to disclose magnetic feed through devices for each vessel or a gear train connecting such devices. Salzman discloses singular stir shafts, providing no teaching for a motor and gear train for driving multiple spindles. Strah has no relevance to the pending claim, as it simply discloses a fluid line coupler.

In addition, newly applied references Conrad, Rutkowski, and Iio fail to disclose a gear train and a motor for rotating gears at speeds from about 0 to about 3000 rpm. Conrad discloses a single Teflon stirrer, but fails to disclose a gear train for rotating multiple magnetic feed through devices and stirrers at speeds from about 0 to about 3000 rpm. Rutkowski discloses a single motor and stirrer, but similarly fails to disclose a gear train for rotating multiple magnetic feed through devices and stirrers at speeds from about 0 to about 3000 rpm. Finally, Iio

[1] Letter to Patent and Trademark Office, August 5, 2003, page 19; Letter to Patent and Trademark Office, February 25, 2004, page 22.

discloses a single, fiber-reinforced impeller, but clearly fails to disclose a gear train for rotating multiple magnetic feed through devices and stirrers at speeds from about 0 to about 3000 rpm.

None of the other references of record provides further relevant teaching. As a result, the cited references do not render claim 169 obvious because they do not show or suggest a gear train and a single motor for rotating spindles at speeds from about 0 to about 3000 rpm. The Office has provided no additional explanation and has cited no additional references that teach such a gear train. The record is absent of any explanation by the Office as to why claim 169 is rendered obvious by the cited art. Claim 169 is allowable because the cited prior art references do not establish a *prima facie* case of obviousness. Among other things, "[t]o establish a prima facie case of obviousness, . . . the prior art reference (or references when combined) must teach or suggest all the claim limitations."[2] Here, the Office fails to meet its burden of establishing a *prima facie* case of obviousness because it has not cited any reference with a gear train for rotating multiple magnetic feed through devices and stirrers at speeds from about 0 to about 3000 rpm. If the Examiner maintains the rejection of the present claim, Applicants request the courtesy of a phone call or a more specific explanation of the present rejection specifically explaining what reference, or group of references, teach these novel features.

For these reasons, claim 169 is believed to be in condition for allowance.

Claim 176

Reconsideration of the rejection of claim 176 under 35 U.S.C. §103(a) as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited or applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

Claim 176 is directed to an apparatus for the parallel processing of reaction mixtures, comprising

> a reactor block having a series of wells therein extending down from an upper surface of the block for containing the reaction mixtures,
> **an upper plate removably secured to said reactor block over said upper surface thereof,** said upper plate having **openings therein in registry with the wells** in the reactor block,
> **stirring mechanisms attached to said upper plate and removable with the upper plate** for stirring said reaction mixtures, said stirring mechanisms

[2] M.P.E.P. § 706.02(j) (emphasis added).

extending down through the openings in the upper plate and into respective wells, and

seals for sealing against leakage through said upper plate openings when the upper plate is secured to the reactor block,

each stirring mechanism comprising a drive mounted on said upper plate and a multi-piece spindle rotatable by said drive, said multi-piece spindle having a metal upper spindle portion, a plastic stirrer, and a coupling for releasably coupling the plastic stirrer to the metal upper spindle portion in a position wherein the stirrer extends down into a respective well, said plastic stirrer being removable from said coupling after a mixing operation to permit discard and replacement of the stirrer.

None of the cited references discloses this unique and patentable array of features. In particular, the claimed apparatus comprises stirring mechanisms attached to an upper plate removably secured over an upper surface of a reactor block and having openings therein in registry with wells of the reactor block for stirring the reaction mixtures. The present rejection of claim 176 relies heavily upon the teaching of Nelles, Corkan, and Lebl. Nelles discloses a single reactor with a rotating shaft and stirring implement.[3] Nelles discloses a lid engaging a pressure container sealing the reactor. Nelles fails to disclose a reactor block with wells, and the lid is not equivalent to the plate defined in claim 176, because it does not include openings therein in registry with multiple wells of a reactor block. Corkan discloses a stirring assembly, but fails to disclose stirring mechanisms attached to and removable with an upper plate. Lebl includes multiple reaction vessels 219 threaded into individual valve caps 227 mounted underneath a plate 211 for simultaneously opening or closing the reaction vessels and dispensing solution into an individual reaction vessel by syringe 217.[4] Importantly, Lebl fails to disclose stirring mechanisms of any sort attached to a plate and removable with the plate. Both Salzman references and the Aldrich reference disclose a singular stirrer extending down from a single motor into materials to be stirred. Neither of the two Salzman references nor Aldrich provides any teaching of an upper plate removably secured to a reactor block having a series of wells with stirring mechanisms attached to the upper plate and removable with the upper plate. Salvet similarly fails to teach an upper plate removably secured to a reactor block having a series of

[3] Nelles, Fig. 2.

[4] Lebl, Figs. 8A and 8B.

wells with stirring mechanisms attached to the upper plate and removable with the upper plate. Strah has no relevance to the pending claim, as it simply discloses a fluid line coupler.

Newly applied references Conrad, Rutkowski, and Iio provide no additional relevant teaching or suggestion. Conrad discloses a single Teflon stirrer, but fails to disclose an upper plate with stirring mechanisms attached, wherein the upper plate and stirring mechanisms are removable from a reactor block. Rutkowski discloses a stirrer and motor mounted separately from a vessel, thereby failing to disclose an upper plate with stirring mechanisms attached, wherein the upper plate and stirring mechanisms are removable from a reactor block. Finally, Iio discloses a single, fiber-reinforced impeller, and clearly fails to disclose an upper plate with stirring mechanisms attached, wherein the upper plate and stirring mechanisms are removable from a reactor block.

The Office states in the present action that it would have been obvious to "provide multiple Nelles reaction vessels as taught by Corkan and Lebl including a common cover (plate) as taught by Lebl."[5] Applicants strongly disagree with this assertion. "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some **teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.**"[6] The Office has not referenced any such teaching, suggestion, or motivation found in the references or described any such teaching, suggestion, or motivation found in the general knowledge of one skilled in the art. Simply stating that it would have been obvious is not enough to establish a *prima facie* case of obviousness. Nothing in the prior art teaches, suggests, or motivates one skilled to combine the references to produce the claimed invention. Applying the stirring capability of Nelles to the multiple vessels of Lebl does not teach one skilled in the art about the advantages of attaching the stirring mechanisms to a common, upper plate. Nelles fails to teach one skilled in the art the advantage of combining several of its caps together as a single plate and mounting multiple shafts on the plate for stirring multiple vessels simultaneously. Moreover, Lebl similarly fails to teach any advantage

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[5] Office action of June 2, 2004, page 9, lines 7-12.

[6] M.P.E.P. § 2143.01 (emphasis added).

associated with mounting multiple stirring mechanisms on a single plate for stirring several reactions simultaneously.

In particular, there is no motivation to modify Lebl with Nelles because Lebl does not suffer from the drawback Nelles aims to solve, namely, sampling while at pressure (Nelles opens all vessels to atmosphere for sampling); and there is no motivation to modify Nelles with the teaching of Lebl because Nelles is directed to stirring and sampling a single vessel, whereas Lebl is directed to opening and closing multiple vessels simultaneously. The only motivation to combine Lebl and Nelles to produce the claimed invention -- wherein stirring mechanisms are attached to an upper plate removably secured over an upper surface of a reactor block and having openings therein in registry with wells of the reactor block for stirring the reaction mixtures -- is from **Applicants' own disclosure**. This motivation is not sufficient. There must be some teaching, suggestion, or motivation found in the references or articulated by the Office as within the general knowledge of one skilled in the art. Indeed, improperly utilizing Applicants' disclosure and hindsight, combining the Nelles reactor with the Lebl apparatus **does** provide an advantage over the single vessel apparatus of Nelles and the multiple vessels of limited functionality of Lebl. But there is no teaching or suggestion to combine these references. Simply because their combination appears **possible** in light of Applicants' disclosure does not mean that there is an adequate **teaching** for an obviousness rejection.

"The mere fact that references **can** be combined or modified does not render the resultant combination obvious unless the prior art also **suggests the desirability of the combination**."[7] It may be **possible** to combine Nelles and Lebl, but because neither suggests the desirability of the combination, the resultant combination is not obvious. Because there is no teaching in Lebl or Nelles for the combination, one skilled in the art would not be motivated to use the Lebl apparatus with the Nelles reactor. As such, the Office has not met its burden in establishing a *prima facie* case of obviousness.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 176. If the Examiner maintains the rejection of the present claim, Applicants request the courtesy of a phone call or a more specific explanation of the present

[7] *Id.* (emphasis added).

rejection specifically explaining what reference, or group of references, teach these novel features.

Claim 177

Reconsideration of the rejection of claim 177 under 35 U.S.C. §103(a) as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited or applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

Claim 177 is directed to an apparatus for parallel processing of reaction mixtures comprising

> **a reactor block having a series of wells therein** extending from an exterior surface of the block for containing the reaction mixtures,
> **a removable plate removably secured to the reactor block, the removable plate having openings therein in registry with the wells** in the reactor block,
> a temperature control system for regulating the temperature of the reaction mixtures, and
> **a stirring system attached to the removable plate and removable with the removable plate for agitating the reaction mixtures**, the stirring system comprising:
> spindles extending into respective wells, each of the spindles having a first end portion and a second end portion,
> a stirring blade attached to the first end portion of each of the spindles, and
> a drive mechanism located external to the wells that is adapted to rotate the spindles.

Claim 177 is patentable for many of the same reasons as set forth above with respect to claim 176. In particular, none of the references disclose (i) a reactor block having a series of wells therein, (ii) a removable plate removably secured to the reactor block, the removable plate having openings therein in registry with the wells in the reactor block, and (iii) a stirring system attached to the removable plate and removable with the removable plate for agitating the reaction mixtures.

As discussed above with respect to claim 176, claim 177 is similarly patentable over Nelles, Lebl, Corkan, Salvet, Conrad, Aldrich, Rutkowski, Iio, Salzman, and Strah, and in particular Nelles and Lebl, for at least the following reasons. First, the Office has failed to put forth any teaching, suggestion, or motivation found in the references or in the general knowledge of one skilled in the art to combine the references in a manner consistent with the claimed

invention. Second, combining Nelles and Lebl does not produce the claimed invention. Third, Nelles and Lebl cannot properly be combined in the manner suggested by the Examiner because they are directed to two different processes having differing requirements and their combination invokes improper hindsight.

For at least these reasons, claim 177 is believed to be in condition for allowance. If the Examiner maintains the rejection of the present claim, Applicants request the courtesy of a phone call or a more specific explanation of the present rejection specifically explaining what reference, or group of references, teach these novel features.

Claims 164, 168-170, 178, 207, 208, and 222, which depend directly or indirectly from claim 177, are submitted as patentable for the same reasons as claim 177.

Claim 197

Reconsideration of the rejection of claim 197 under 35 U.S.C. §103(a) as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited or applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

Claim 197 is directed to a combinatorial chemistry reactor system for parallel processing of reaction mixtures comprising

> a reactor block having a series of wells therein for holding said reaction mixtures,
>
> a removable plate removably secured to the reactor block, **the removable plate having openings therein in registry with the wells in the reactor block,**
>
> **seals for sealing the wells of the reactor block to allow said reaction mixtures to react under pressure when the removable plate is secured to the reactor block**, and
>
> **a stirring system supported by the removable plate and removable with the removable plate for agitating the reaction mixtures**, the stirring system comprising
>
> stirrers extending into respective wells, and
>
> a drive mechanism located external to the wells for moving the stirrers to agitate reaction mixtures in the wells.

None of the cited references discloses this unique and patentable array of features. In particular, the claimed combinatorial chemistry reactor system comprises a stirring system **supported by and removable with the removable plate, and openings in the removable plate in registry with the wells**. The reactor system further comprises **seals for sealing the wells of the reactor block to allow the reaction mixtures to react under pressure when the**

removable plate is secured to the reactor block. The present rejection of claim 197 relies heavily upon the teaching of Nelles and Lebl, as discussed above with respect to claim 176. Newly cited references of Conrad, Rutkowski, and Iio are not particularly germane to claim 197. Conrad discloses a single Teflon stirrer, but fails to disclose a removable plate supporting a stirring system, wherein the plate and stirring system are removable from a reactor block. Rutkowski discloses a stirrer and motor mounted separately from a vessel, thereby failing to disclose a removable plate with a stirring system attached, wherein the plate and stirring system are removable from a reactor block. Finally, Iio discloses a single, fiber-reinforced impeller, clearly failing to disclose a removable plate with a stirring system attached, wherein the plate and stirring system are removable from a reactor block.

Returning to the references chiefly relied upon by the Office, Nelles and Lebl, Nelles discloses a single reactor with a rotating shaft and stirring implement. Nelles fails to disclose a reactor block with wells, and the lid is not equivalent to the plate defined in claim 197, because it does not include openings therein in registry with multiple wells of a reactor block. Lebl includes multiple reaction vessels 219 threaded into individual valve caps 227 mounted underneath a plate 211 for simultaneously opening or closing the reaction vessels and dispensing solution into an individual reaction chamber by syringe 217.[8] Importantly, the Lebl embodiment of Figs. 8 and 8A fails to disclose stirring mechanisms of any sort attached to a plate and removable with the plate. This Lebl embodiment also fails to disclose seals for sealing the vessels with the plate engaging the vessels. In fact, Lebl teaches away from sealing this embodiment when teaching of another embodiment that includes sealing "adapted to resist greater internal pressure in a reaction vessel."[9] By teaching greater internal pressures with respect to another embodiment, Lebl teaches away from such elevated pressures in the embodiment of interest in Figs. 8 and 8A. Applicants put forth these arguments in the previous Office action response,[10] but the Office did not address them specifically in the most recent June 2, 2004, Office action. Applicants respectfully request full consideration of these arguments with respect to claim 197.

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[8] Lebl, Figs. 8A and 8B.

[9] Lebl, column 25, line 23 to column 26, line 12.

[10] Letter to Patent and Trademark Office, February 25, 2004, pages 32-35.

In addition, as discussed above with respect to claim 176, combining Nelles and Lebl does not produce the claimed invention. Nelles fails to teach one skilled in the art the advantage of combining several of its caps together as a single plate and mounting multiple shafts on the plate for stirring multiple vessels simultaneously. Moreover, Lebl similarly fails to teach any advantage associated with mounting multiple stirring mechanisms on a single plate for stirring several reactions simultaneously.

The combination of Nelles and Lebl in the manner suggested by the Examiner is improper because the references are directed to two different processes having differing requirements. Nelles focuses on solving the problems associated with the need for sampling from a reactor at pressure. In contrast to Nelles, Lebl focuses on a plurality of reactor vessels that may be opened or closed simultaneously via common valving associated with a common plate. Lebl does not require or disclose a need for multiple stirring mechanisms attached to a common plate. Indeed, improperly utilizing Applicants' disclosure and hindsight, combining the Nelles reactor with the Lebl apparatus does provide an advantage over the single vessel apparatus of Nelles and the multiple vessels of limited functionality of Lebl. However, there is no teaching or suggestion to combine these references. Simply because their combination appears possible in light of Applicants' disclosure does not mean that there is an adequate teaching for an obviousness rejection.

Here, there is no motivation to modify Lebl with Nelles because Lebl does not suffer from the drawback Nelles aims to solve, namely, sampling while at pressure (Nelles opens all the vessels to the atmosphere and then samples); and there is no motivation to modify Nelles with the teaching of Lebl because Nelles is directed to stirring and sampling a single vessel, whereas Lebl is directed to opening and closing multiple vessels simultaneously. The only motivation to combine Lebl and Nelles to produce the claimed invention is from Applicants' own disclosure. It may be possible to combine Nelles and Lebl, but because neither suggests the desirability of the combination, the resultant combination is not obvious. Because there is no teaching in Lebl or Nelles for the combination, one skilled in the art would not be motivated to use the Lebl apparatus with the Nelles reactor. As such, the Office has not met its burden in establishing a *prima facie* case of obviousness.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 197. If the Examiner maintains the rejection of the present claim,

Applicants request the courtesy of a phone call or a more specific explanation of the present rejection specifically explaining what reference, or group of references, teach these novel features.

Claims 198-205, 228, and 229, which depend directly or indirectly from claim 197, are submitted as patentable for the same reasons as claim 197.

Claim 198

Reconsideration of the rejection of claim 198 under 35 U.S.C. §103(a) as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited or applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

Claim 198 is directed to a system wherein the drive mechanism comprises a **drive train** for driving the stirrers, and **a motor** for driving the drive train. None of the references, taken individually or in combination, discloses or suggests these novel elements.

None of the previously cited references discloses or suggests a drive train for driving the stirrers and a motor for driving the drive train. As discussed in Applicants' previous two responses, Salvet discloses a shaft-stirred magnetic feed through device for stirring the contents of a vessel, but it does not disclose a drive mechanism comprising a drive train for moving the stirrers in the wells. Aldrich similarly fails to disclose multiple vessels having a drive mechanism comprising a drive train. Corkan discloses stir bar stirring with a fifteen-vessel solid-state stirring assembly 16A (Fig. 2), but fails to disclose a drive train for moving each of the stir bars. Nelles discloses a single reactor and therefore has no need for such a drive train. Lebl includes multiple reaction vessels, but fails to disclose a drive train for driving stirrers in respective vessels. Salzman discloses singular stir shafts, providing no teaching for a drive train for driving multiple stirrers. Strah has no relevance to the pending claim, as it simply discloses a fluid line coupler.

With respect to the newly cited references, they too fail to disclose a drive train for driving the stirrers and a motor for driving the drive train. Conrad discloses a single Teflon stirrer, but fails to disclose a drive train for driving multiple stirrers with a single motor. Rutkowski discloses a stirrer and motor mounted separately from a vessel, but fails to disclose a drive train for driving multiple stirrers with a single motor. Finally, Iio discloses a single, fiber-

reinforced impeller, but fails to disclose a drive train for driving multiple stirrers with a single motor.

As a result, the cited references do not render claim 198 obvious because they do not show or suggest a drive train and a motor for driving the drive train. For these reasons, claim 198 is believed to be in condition for allowance. If the Examiner maintains the rejection of the present claim, Applicants request the courtesy of a phone call or a more specific explanation of the present rejection specifically explaining what reference, or group of references, teach these novel features.

Claim 199, which depends directly from claim 198, is submitted as patentable for the same reasons as claim 198.

Claim 199

Reconsideration of the rejection of claim 199 under 35 U.S.C. §103(a) as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited or applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

Claim 199 is directed to a system wherein the drive train comprises **a plurality of drive gears in mesh with one another** and a **motor** for driving the drive gears. None of the references, taken individually or in combination, discloses or suggests these novel elements.

As discussed above with respect to claim 198, none of the references discloses a drive train. In addition, none of the references discloses or suggests a drive train comprising **a plurality of drive gears in mesh with one another**. Salvet discloses a shaft-stirred magnetic feed through device, but discloses no meshing gears. Aldrich and Salzman disclose motor-turned shafts, but disclose no meshing gears. Corkan teaches stir bar stirring, but discloses no meshing gears. Nelles discloses stirring, but discloses no meshing gears. Lebl includes multiple reaction vessels, but discloses no meshing gears. Strah is immaterial to this claim. Each of newly cited Conrad, Rutkowski, and Iio discloses single stirrers, but each fails to disclose or suggest a drive train comprising a plurality of drive gears in mesh with one another.

As a result, the cited references do not render claim 199 obvious because they do not show or suggest a plurality of drive gears in mesh with one another. For at least these reasons, claim 199 is believed to be in condition for allowance. If the Examiner maintains the rejection of the present claim, Applicants request the courtesy of a phone call or a more specific explanation

of the present rejection specifically explaining what reference, or group of references, teach these novel features.

Claim 200

Reconsideration of the rejection of claim 200 under 35 U.S.C. §103(a) as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited or applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

Claim 200 is directed to a system wherein the drive mechanism comprises a **plurality of drive gears on the stirrers**, and **one or more motors** for driving the drive gears. As discussed above with respect to claim 199, none of the references discloses or suggests drive gears. In addition, none of the references discloses or suggests a plurality of **drive gears on the stirrers**, and one or more motors for driving the drive gears. Salvet discloses a shaft-stirred magnetic feed through device, but discloses no drive gears on the stirrers. Aldrich and Salzman disclose motor-turned shafts, but disclose no drive gears on the stirrers. Corkan teaches stir bar stirring, but discloses no drive gears on the stirrers. Nelles discloses stirring, but discloses no drive gears on the stirrers. Lebl includes multiple reaction vessels, but discloses no drive gears on the stirrers. Strah is immaterial to this claim. Newly cited Conrad, Rutkowski, and Iio disclose single stirrers, but each fail to disclose or suggest a **plurality of drive gears on the stirrers**, and **one or more motors** for driving the drive gears. As a result, the cited references do not render claim 200 obvious because they fail to show or suggest a plurality of drive gears on the stirrers.

For at least these reasons, claim 200 is believed to be in condition for allowance. If the Examiner maintains the rejection of the present claim, Applicants request the courtesy of a phone call or a more specific explanation of the present rejection specifically explaining what reference, or group of references, teach these novel features.

Claim 201, which depends directly from claim 200, is submitted as patentable for the same reasons as claim 200.

Claim 206

Reconsideration of the rejection of claim 206 under 35 U.S.C. §103(a) as being unpatentable over Nelles in view of Lebl, Corkan and Salvet or Conrad (newly cited or applied) and Aldrich, Rutkowski, Iio, Salzman or Strah is respectfully requested.

Claim 206 is directed to a combinatorial chemistry reactor system for parallel processing of reaction mixtures comprising

> a reactor block having a series of wells therein extending down from an upper surface of the block, said wells holding said reaction mixtures,
>
> **an upper plate removably secured to the reactor block in face-to-face relation with said upper surface**, the removable plate having openings therein in registry with the wells in the reactor block,
>
> **seals for sealing the wells of the reactor block to allow said reaction mixtures to react under pressure** when the removable plate is secured to the reactor block, and
>
> **a stirring system supported by the removable plate and removable with the removable plate** for agitating the reaction mixtures, the stirring system comprising
>
> stirrers extending into respective wells, and
>
> a drive mechanism located external to the wells for moving the stirrers to agitate reaction mixtures in the wells, said drive mechanism comprising a **drive train for driving said stirrers** and one or more motors for driving said drive train, said stirrers being removably attached to said drive mechanism.

Claim 206 is directed to several features previously discussed with respect to other claims noted above. In particular, none of the references of record discloses an upper plate removably secured to the reactor block in face-to-face relation with the upper surface of the reactor block. Please refer to the discussion of claim 176 above. Moreover, none of the references discloses seals for sealing the wells of the reactor block to allow the reaction mixtures to react under pressure when the removable plate is secured to the reactor block, as discussed above with respect to claim 197. Similarly, none of the references discloses a stirring system supported by the removable plate and removable with the removable plate, as discussed above with respect to claim 176. Finally, none of the references discloses a drive train for driving the stirrers, as discussed above with respect to claim 198.

For at least these reasons, claim 206 is believed to be in condition for allowance. If the Examiner maintains the rejection of the present claim, Applicants request the courtesy of a phone call or a more specific explanation of the present rejection specifically explaining what reference, or group of references, teach these novel features.

Claims 171, 174, 175, 220, and 221, which depend directly or indirectly from claim 206, are submitted as patentable for the same reasons as claim 206.

Conclusion

Applicants hereby request an extension of time to and including October 2, 2004, for filing a response to the above-referenced Office action. A check in the amount of $110.00, in payment of the applicable one month extension fee is enclosed herewith.

The Commissioner is hereby authorized to charge any payment required to Deposit Account No. 19-1345.

In view of the foregoing, favorable reconsideration and allowance of this application is requested.

Respectfully submitted,

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